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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/754,612	01/12/2004	Young-Ho Kim	0630-1918P	8543

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BIRCH STEWART KOLASCH & BIRCH  
PO BOX 747  
FALLS CHURCH, VA 22040-0747

EXAMINER
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RIGGLEMAN, JASON PAUL

ART UNIT	PAPER NUMBER
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1792

NOTIFICATION DATE	DELIVERY MODE
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05/02/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/754,612	<b>Applicant(s)</b> KIM ET AL.	
	<b>Examiner</b> JASON P. RIGGLEMAN	<b>Art Unit</b> 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-20 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-20 is/are allowed.
- 6) ☒ Claim(s) 1 and 6 is/are rejected.
- 7) ☒ Claim(s) 2-4 and 7-12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Status of Claims***

1. Applicant's reply filed on 1/14/2008 is acknowledged. Current pending claims are 1-4 and 6-20. Claims 1 and 6 are amended. Claim 5 is cancelled.

### ***Response to Arguments***

2. Applicant's reply filed on 1/14/2008 is acknowledged. Applicant's arguments, with respect to the 103 (a) rejections of claims 1 and 6 over Neyhouse et al. in view of Wahl and Daush et al. and Koshiga et al. have been fully considered and are persuasive. Therefore, the rejections have been withdrawn. However, upon further consideration, a new ground(s) of rejection is made as described below. Applicant's arguments with respect to claims 1 and 6 have been considered but are moot in view of the new ground(s) of rejection.

3. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burk et al. (US Patent No. 4910979) in view of Koshiga et al. (European Patent Application No. EP0949374).

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6. Burk et al. teaches a washing machine comprising an outer tub (wash tub 14); inner tub (wash basket 16); and a washing machine casing (cabinet 12). The inner tub is rotatably disposed in the inner tub for containing laundry therein. The PSC motor 20 of Burk et al. is connected via a drive belt 30 to the planetary gear transmission, Figs. 1 & 4. The machine of Burk et al. has a rotation transmission means for transmitting a rotational force of the motor to rotate the inner tub (basket 16) with a rotational speed lower than a rotational speed of the induction motor in the laundering operation "since the inertia of the basket is greater than the agitator the basket will rotate much less than the agitator", (Column 1, Lines 53-58) (Column 3, Lines 12-27). Here, in the laundering operation, the agitator speed ~ the motor speed, Fig. 4. Also, the motor speed is the same as that of the inner tub dehydrating operation – since a clutch 5 is engaged and the ring gear 37 and shaft 48 (turned directly by pulley) rotate as one body. (Note: motor speed is assumed to be the speed of the pulley spun by the PSC motor by the drive belt --- any reduction between the motor and pulley is an obvious variant.)

7. Burk et al., does not teach the direct-drive induction motor; however, Koshiga et al. teaches, paragraph [0025], the use of a rotor 45a having a magnet on its outer circumference for apply a magnetic field and a stator 45b disposed at the outer circumferential side of the magnet for applying a magnetic field to the rotor. A gap S is provided between the stator 45b and the rotor 45a, Fig. 12. The inner tub rotated co-axially with a rotational center of the rotor, Fig. 1. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Burk et al. with Koshiga et

al. to create a compact direct-drive induction motor driven washing machine to achieve the expected space-saving result.

***Allowable Subject Matter***

8. Claims 2-4 and 7-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: the planetary-sun-ring gear arrangement which controls the speed of the motor/tub is not an obvious modification of Neyhouse et al. in view of Wahl.

10. Claims 13-20 allowed.

11. The following is an examiner's statement of reasons for allowance: The closest prior art, Burk et al. (US Patent No. 5000016) teaches a washing machine which has basket and agitator which are reversely oscillated during a wash mode and co-rotated during a liquid extraction. Burk et al. also teaches a planetary gear reduction arrangement in the transmission; however, there is no suggestion that the that tub and pulsator are capable of rotating in the same direction at the same speed as the motor because this is not possible with the transmission of Burk et al. and is not an obvious modification.

12. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON P. RIGGLEMAN whose telephone number is (571)272-5935. The examiner can normally be reached on M-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on 571-272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Barr/  
Supervisory Patent Examiner, Art Unit 1792

Jason P Riggleman  
Examiner  
Art Unit 1792

/J. P. R./  
Examiner, Art Unit 1792